

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:
Christopher Hoover

Examiner:

For: METHOD FOR HIERARCHICAL
SPECIFICATION OF SCHEDULING IN
SYSTEM-LEVEL SIMULATIONS

Group Art Unit: 2123

Serial No.: 09/691,406

Filed: October 17, 2000

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TRANSMITTAL LETTER

Attn: Application Processing Division
Customer Correction Branch
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

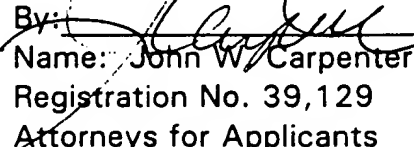
Enclosed is a Request For Correction Of The Official Filing Receipt for the above-identified patent application.

The Commissioner is hereby authorized to charge any additional fees (or credit any overpayment) associated with this communication and which may be required under 37 CFR § 1.16 or § 1.17 to Deposit Account No. 03-3821, referencing **Attorney Docket No. 21891.02500**. A duplicate sheet is attached.

Respectfully submitted,
Crosby, Heafey, Roach & May
Professional Corporation

Dated: December 19, 2000

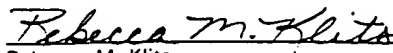
Two Embarcadero Ctr., Ste. 2000
PO Box 7936
San Francisco, CA 94120-7936
Direct Dial (415) 659-5927
(415) 543-8700 Telephone
(415) 391-8269 Facsimile

By: 
Name: John W. Carpenter
Registration No. 39,129
Attorneys for Applicants

CERTIFICATE OF MAILING - 37 C.F.R. § 1.08

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Attn: Application Processing Division, Customer Correction Branch, Washington, D.C. 20231 on December 19, 2000.

December 19, 2000


Rebecca M. Klits



Attorney's Docket No. 21891.02500

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:
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For: METHOD FOR HIERARCHICAL
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Group Art Unit: 2123

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REQUEST FOR CORRECTION OF THE OFFICIAL FILING RECEIPT

Attn: Application Processing Division
Customer Correction Branch
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Attached is a copy of the Filing Receipt which was received in our offices on December 19, 2000, in connection with the above-identified application.

The Filing Receipt is in error. Please amend the receipt as shown in red ink on the attached copy as follows:

The Title should read:

Method for hierarchical specification of scheduling in system-level
simulations

A copy of the first page of the patent application showing the title of the application is enclosed.

Please forward the amended Official Filing Receipt to:

John W. Carpenter
CROSBY, HEAFEY, ROACH & MAY
P.O. Box 7936
San Francisco, CA 94120-7936

In the event it is determined that a fee pursuant to 37 C.F.R. § 1.19(h) is required in connection with this request, the Commissioner is hereby authorized to charge any additional fees, including any fees necessary for extensions of time, or credit overpayment to Deposit Account No. 03-3821, referencing **Attorney Docket No. 21891.02500**. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Crosby, Heafey, Roach & May
Professional Corporation

Dated: December 19, 2000

Two Embarcadero Center, Ste. 2000
P.O. Box 7936
San Francisco, CA 94120-7936
Direct Dial (415) 659-5927
(415) 543-8700 Telephone
(415) 391-8269 Facsimile
jcarpenter@chrm.com

By: 

Name: John W. Carpenter
Registration No. 39,129
Attorneys for Applicants



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/691,406	10/17/2000	2123	854	21891.02500	6	28	2

Tosby, Heafey, Roach & May
P.O. Box 7936
San Francisco, CA 94120-7936

FILING RECEIPT



OC000000005605515

Date Mailed: 12/07/2000

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Christopher Hoover, Los Gatos, CA ;

Continuing Data as Claimed by Applicant

Foreign Applications

If Required, Foreign Filing License Granted 11/30/2000

Title

hierarchical
Method for hierarchical specification of scheduling in system-level simulations

Preliminary Class

703

Data entry by : GURMU, MULUEMEBET

Team : OIPE

Date: 12/07/2000



COPY

**A METHOD FOR HIERARCHICAL SPECIFICATION
OF SCHEDULING IN SYSTEM-LEVEL SIMULATIONS**

Inventor: Christopher Hoover



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ABSTRACT OF THE DISCLOSURE

A method for hierarchical specification and modeling of scheduling in system-level simulations. The invention addresses the specification aspect by introducing an explicit notion of a scheduler that must be designed as part of the system. A scheduler effectively represents a scheduling policy for an architectural resource. A scheduling policy governs how behaviors assigned to a resource, gain access and share the resource. The invention includes a general framework for modeling a scheduling policy, which includes a simple mechanism that covers many common cases. This framework is part of a Virtual Component Codesign (VCC) process, which is targeted at consumer embedded system design. Two orthogonal models, one of a scheduler and one of a schedulable, comprise the overall modeling of scheduling in the invention. The two models interact by sending messages to each other via a simple protocol. The protocol itself is implemented by a pair of abstract interfaces, which in turn are implemented in concrete schedulable and scheduler objects in the simulator.



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UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
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Bib Data Sheet

CONFIRMATION NO. 3943

SERIAL NUMBER 09/691,406	FILING DATE 10/17/2000 RULE	CLASS 703	GROUP ART UNIT 2123	ATTORNEY DOCKET NO. 21891.02500
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APPLICANTS

Christopher Hoover, Los Gatos, CA;

** CONTINUING DATA *****

None

** FOREIGN APPLICATIONS *****

None

IF REQUIRED, FOREIGN FILING LICENSE GRANTED

** 11/30/2000

Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	STATE OR COUNTRY CA	SHEETS DRAWING 6	TOTAL CLAIMS 28	INDEPENDENT CLAIMS 2
35 USC 119 (a-d) conditions met <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after Allowance				
Verified and Acknowledged Examiner's Signature _____ Initials _____				

ADDRESS

John W. Carpenter
CROSBY, HEAFEY, ROACH & MAY
P.O. Box 7936
San Francisco, CA 94120-7936

TITLE

Method for hierarchical specification of scheduling in system-level simulations

FILING FEE RECEIVED 984	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:	<input type="checkbox"/> All Fees
		<input type="checkbox"/> 1.16 Fees (Filing)
		<input type="checkbox"/> 1.17 Fees (Processing Ext. of time)
		<input type="checkbox"/> 1.18 Fees (Issue)
		<input type="checkbox"/> Other _____
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FILE COPY

Attorney's Docket No. 21891.02500

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:
Christopher Hoover

Examiner:

For: METHOD FOR HIERARCHICAL
SPECIFICATION OF SCHEDULING IN
SYSTEM-LEVEL SIMULATIONS

Group Art Unit: 2123

Serial No.: 09/691,406

Filed: October 17, 2000

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SECOND REQUEST FOR CORRECTION OF THE OFFICIAL FILING RECEIPT

Assistant Commissioner for Patents
Office of Initial Patent Examination
Customer Service Center
Washington, D.C. 20231

Sir:

On December 19, 2000, Applicant filed a Request for Correction of the Official Filing Receipt (copy enclosed) in the above-referenced application. Applicant received a second Filing Receipt dated April 20, 2001, however, the requested correction had not yet been made.

The Filing Receipt is still in error. Please amend the receipt as shown in red ink on the attached copy as follows:

The Title should read:

Method for hierarchical specification of scheduling in system-level
simulations

Please forward the amended Official Filing Receipt to:

John W. Carpenter
CROSBY, HEAFEY, ROACH & MAY
P.O. Box 7936
San Francisco, CA 94120-7936



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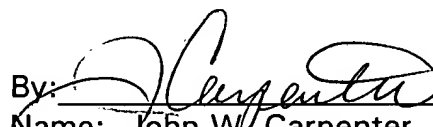
No fee is believed to be required, however if it is determined that a fee pursuant to 37 C.F.R. § 1.19(h) is required in connection with this request, the Commissioner is hereby authorized to charge any additional fees, including any fees necessary for extensions of time, or credit overpayment to Deposit Account No. 03-3821, referencing **Attorney Docket No. 21891.02500**. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Crosby, Heafey, Roach & May
Professional Corporation

Dated: May 14, 2001

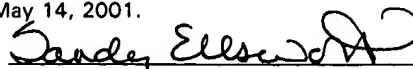
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San Francisco, CA 94120-7936
Direct Dial (415) 659-5927
(415) 543-8700 Telephone
(415) 391-8269 Facsimile
jcarpenter@chrm.com

By: 
Name: John W. Carpenter
Registration No. 39,129
Attorneys for Applicants

CERTIFICATE OF MAILING - 37 C.F.R. § 1.08

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Office of Initial Patent Examination, Customer Service Center, Washington, D.C. 20231 on May 14, 2001.

May 14, 2001


Sandy Ellsworth



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/691,406	10/17/2000	2123	984	21891.02500	6	28	2

CONFIRMATION NO. 3943

FILING RECEIPT



OC000000005989286

John W. Carpenter
CROSBY, HEAFEY, ROACH & MAY
P.O. Box 7936
San Francisco, CA 94120-7936

Date Mailed: 04/20/2001

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Christopher Hoover, Los Gatos, CA;

Domestic Priority data as claimed by applicant

Foreign Applications

If Required, Foreign Filing License Granted 11/30/2000

Projected Publication Date: N/A

Non-Publication Request: No

Early Publication Request: No

Title

hierarchical
Method for hierarchical specification of scheduling in system-level simulations

Preliminary Class

703

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Data entry by : WOLDEYES, TEGUEST

Team : OIPE

Date: 04/20/2001





LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

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The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 36 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time; if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15 (b).

PLEASE NOTE the following information about the Filing Receipt:

- The articles such as "a," "an" and "the" are not included as the first words in the title of an application. They are considered to be unnecessary to the understanding of the title.
- The words "new," "improved," "improvements in" or "relating to" are not included as first words in the title of an application because a patent application, by nature, is a new idea or improvement.
- The title may be truncated if it consists of more than 600 characters (letters and spaces combined).
- The docket number allows a maximum of 25 characters.
- If your application was submitted under 37 CFR 1.10, your filing date should be the "date in" found on the Express Mail label. If there is a discrepancy, you should submit a request for a corrected Filing Receipt along with a copy of the Express Mail label showing the "date in."
- The title is recorded in sentence case.

Any corrections that may need to be done to your Filing Receipt should be directed to:



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Washington, DC 20231

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Serial No. 09/691,406 CHR&M File No. 21891.02500 By JWC
In the Matter of the Application of Christopher Hoover
Date Mailed 12/19/00 Due Date —

The following has been received in the U.S. Patent Office on the date stamped hereon:

- | | |
|--|--|
| <input type="checkbox"/> Oath/Declaration | <input type="checkbox"/> Petition |
| <input type="checkbox"/> Power of Attorney | <input type="checkbox"/> Issue Fee Transmittal Form |
| <input type="checkbox"/> Check | <input type="checkbox"/> Trademark Appln. & Specimens |
| <input type="checkbox"/> Deposit Account Order Form | <input type="checkbox"/> Sec. 8 & 15 Affidavits |
| <input type="checkbox"/> Drawings _____ sheets | <input type="checkbox"/> Trademark Renewal Appln. |
| <input type="checkbox"/> Informal | <input type="checkbox"/> Utility (regular) Appln. |
| <input type="checkbox"/> Formal | <input type="checkbox"/> Design Patent Appln. |
| <input type="checkbox"/> Assignment | <input type="checkbox"/> Plant Appln. |
| <input checked="" type="checkbox"/> Letter (Transmittal) | <input type="checkbox"/> Terminal Disclaimer |
| <input type="checkbox"/> Information Disclosure
(Prior Art) Statement | <input type="checkbox"/> PCT Appln. |
| <input type="checkbox"/> Notice of Appeal | <input type="checkbox"/> Small Entity Declaration |
| <input type="checkbox"/> Extension of Time Request | <input checked="" type="checkbox"/> Certificate of Mailing |
| <input type="checkbox"/> Amendment/Response | <input type="checkbox"/> Express Mail Certificate |
| <input type="checkbox"/> Affidavit | <input checked="" type="checkbox"/> Other <u>Request For Corrected Filing</u>
<u>Rept., Copy of Filing Rept.,</u>
<u>Copy of 131 pg. of appln.</u> |

